Remarks

Claim 21 was pending prior to the above amendments. Claim 21 is amended for clarity and to correct typographical errors. Claims 22-32 are newly presented to more particularly point out and distinctly claim Applicants' invention.

The Examiner required the Specification to further recite particulars relating to the related applications. Applicants have accordingly amended the Specification.

The Examiner objected to Claim 21 for formalities. As amended, Applicants believe that the Examiner's objections are overcome.

The Examiner rejected Claim 21 under 35 U.S.C. § 102(b) as unpatentable over U.S. Patent 4,426,712 ("Gorski-Popiel"), stating:

> As shown in figures 2-4b, Gorski-Popiel discloses a system and a method for operating a GPS C/A code receiver comprising:
>
> A plurality of channel means (column 2, lines 50-62), each comprising:
>
> Means (282) for forming x multibit digital segment values per C/A code period, each multibit digital segment value representing a sequential code segments of a received composite of satellite signals (column 4, line 20-column 5, line 39); and
>
> A plurality of correlating means for correlating each multibit digital segment value with n (=10 here) satellite specific set of m differently time delayed segments of C/A code modulation to form at least n time m time delay specific correction values (column 5, lines 35-60), where m is greater than the number of bits (8) in each multibit digital segment value.

Applicants respectfully submit that the Examiner is mistaken. Applicants' Claim 21 recites:

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21. A system for operating a GPS C/A code receiver comprising:

a plurality of channel means, each comprising:

means for forming x multibit digital segment values per C/A code period, x being an integer, each multibit digital segment value representing a sequential code segment of a received composite of satellite signals; and

a plurality of correlating means for correlating each multibit digital segment value with n satellite specific set of m different time delayed segments of C/A code, n and m being integers, to form at least n times m delay specific correlation values, wherein m is greater than the number of bits in each multibit digital segment value.

(emphasis added)

The underlined limitation above results from careful consideration of a number of factors. These factors and the resulting advantages are discussed, for example, in Applicants' Specification, beginning on page 52, line 17 to page 55, line 38. In contrast, Gorski-Popeil's system does not meet the above-underlined limitation by providing, for each satellite, 8 code position correlations (i.e., m = 8) for each 8 bits of quantized data:

> In Fig. 4b the structure of one correlator, for example, correlator 7, is expanded. In this correlator, the data from quantizer 36, sampled once every 500 nsec (twice per code chip), is accumulated into a system of double buffered 1X8 bit serial to parallel registers 282. ... Meanwhile the first register is switched to parallel output operation and all 8 bits are combined with the doppler compensated code input 190 in half-adders (exclusive-OR) 284-298 to give a correlation. ... During one µsec therefore 8 code position correlations have been performed for all 10 satellites under investigation.

(Gorski-Popiel, at col. 5, lines 35-52; emaphasis added)

As Gorski-Popiel neither meets Claim 21's limitations nor provides any motivation or suggestion to modify its system in the direction of Applicants' Claim 21, Applicants therefore

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respectfully submit that Claim 21 is allowable over Gorski-Popiel. Reconsideration and allowance of Claim 21 is therefore requested.

Newly presented Claims 22-32 are believed allowable over the prior art for at least the reasons stated above with respect to Claim 21.

For the above reasons, all pending claims (i.e., Claims 21-32) are believed allowable. Their allowance is therefore requested. If the Examiner has any question regarding the above, the Examiner is respectfully requested to telephone the undersigned Attorney for Applicant at (408)-392-9250.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on February 1, 2005.

Attorney for Applicant(s) — Date of Signature: 2/1/2005

Respectfully submitted,

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